

Community News

Joint JSC team travels to Disney for robot competition

A thermal overload of circuit breakers brought "Team Integral's" dreams of winning a national competition to a grinding halt last month but volunteers said they are ready to tackle the challenge again next year.

After four months of intense building, strategy and practice meetings, Integral—a team of JSC engineers and Clear Creek Independent School District high school students—traveled to Walt Disney World's Epcot Center in Florida along with 11 other NASA teams from around the agency to compete against more than 100 other teams for the Inspiration and Recognition of Science and Technology, or FIRST, national robot competition.

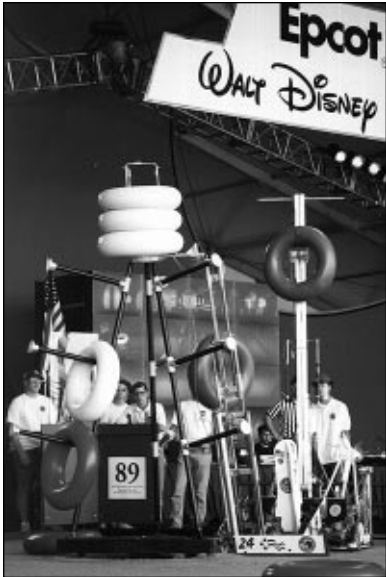
The Integral robot proved worthy of a top quarterly seeding position, but was defeated during the intense double elimination competition due to thermal overload in its circuit breakers.

"Integral's primary strategy was to 'control the top' of the goal by latching a 'shield' on the top of the goal to eliminate the high leverage scores and to place a 'sword' with three tubes into a unique 'keyway' in the shield to score

on top," said Charlie Price, team lead from Engineering's Automation and Robotics Division. "The shield deployed beautifully, but getting it to the goal took longer than expected in the rough and tumble competition environment. Thus, the secondary strategy of defensive 'flippers' was used and proved to be very effective in tipping over the opponents."

Integral won two of its four seeding rounds and placed second in the other two. In one round, Integral tipped over both opponents in a period of 38 seconds. In its first tournament round, Integral won a battle at the top against one opponent, but not before the other opponent had scored in a position that proved pivotal to the outcome. The delivery of the winning tubes on the sword was foiled by a thrown tube striking the sword at the last second of play.

In the second tournament round, Integral flipped one opponent literally 'out of the ring' within 15 seconds and was close in taking out the second opponent (loaded with three tubes) within the next 5 seconds. However, the second opponent slipped off the flipper, and speedily got to the goal, latched the



Photos courtesy of Clear Creek Independent School District

Left: Team Integral competes against more than 100 other teams for the Inspiration and Recognition of Science and Technology, or FIRST, national robot competition at Walt Disney World's Epcot Center in Florida. The JSC team spent more than four months preparing to compete in the national event. Above: Team Integral was a cooperative effort between JSC engineers and Clear Creek Independent School District high school students and teachers.

three tubes on the top, and hung on. The round ended with Integral raising the opponent's base and pulling hard, trying to dislodge it and the tubes.

The tournament was won by the Beatty Machine and Manufacturing and Hammond High School of Hammond, Ind., in a best of three series against Delphi Interior and Lighting and Pontiac Central High School of Troy, Mich. Both teams used 'swords' loaded with tubes (by a student player) to score at the top of the goal. Delphi forced a 'waiting game' by blocking out Beatty from its student player station until the last half of the match, then making a break for its own student sta-

tion. Beatty's quickness prevailed.

Out of the 11 NASA teams entered in the competition, only Ames Research Center and its partner Henry M. Gunn High School went home with an award. The team won the Autodesk Animation Award.

All participants—students from Clear Brook, Clear Creek, and Clear Lake high schools, teachers, administrators and engineers—learned a lot from this activity. All agreed that it was worth the effort, and want to do it again next year. Advocacy for additional teams from Houston for the 1998 competition began this week with a debrief to regional school district superintendents.



Photo by Wendy Reid

Boy Scout Troop 609 participates and eventually wins the tug-o-war event during their Camp-o-Ree at JSC's pecan grove. From left are Tyler Collins, Martin Bryant, Mike Whitten and Paul Burns.

Boy Scouts endure rain for JSC camp out

More than 230 scouts and scout leaders endured the rain and the mud during the Challenger District, Bay Area Council Camp-o-Ree held recently in JSC's pecan grove.

The Boy Scouts camped out over the weekend and participated in team/scout skill competition. Some of the scout skills included first aid, knot tying, plant identification, cooking, and map and compass skills. These scout skills were judged not only on the completion of the task, but on organization, teamwork, leadership and scouting spirit. The Boy Scouts teach all of these skills plus good citizenship and values using the camping program to make it all fun.

Camp Coordinator Mark Fridye of the Mission Operations Directorate and worked with Judy Rosen, Challenger district committee member, to organize the weekend of scouting activities.

"This event took many weeks of preparation and would not have been possible without help from many JSC organizations," Fridye said. "JSC employees in Public Affairs, the fire department, Security and Center Operations all assisted in providing the necessary resources for the Boy Scouts."

While the weather did not cooperate, it did not put a damper on the fun that all the boys had, especially in the tug-o-war event. The event leaders said they appreciated all the help that was provided to make the weekend a memorable experience for the 165 youth scouts who participated. This was the second year that the Challenger District has held its Camp-o-Ree at JSC. The district is comprised of local troops within the Friendswood, League City and Santa Fe areas. A visiting troop from Corpus Christi also participated in this year's activities.

Several JSC employees and contractors are scout leaders and helped out during the two-day event. Scout leaders from Mission Operations included Craig Oliver, Robert Alexander, Eric Redding, Stacey Hale, Scott Christiansen, Ron Harris and Wayne Hale.

"This event allowed the boys to demonstrate and compete in all the skills that boy scouts learn," Hale said. "Even more important, the event allowed the boys to practice teamwork and leadership. Building boys into good citizens is the ultimate goal of the Boy Scout movement."

Winner of the best troop at the Camp-o-Ree went to Troop 609 sponsored by St. Christopher's Episcopal Church for the second year.

Boys interested in joining or leaders who would like to volunteer can contact Scott Chistiansen at 281-282-5466 for information.

JSC saves more than 10,700 trees

JSC recycling efforts continue to save trees

Since its inception in 1989, JSC's recycling efforts has done its share to save the environment, but lately undesirable items are making their way into the recyclable paper bins causing Tolman Building Maintenance, JSC's custodial services contractor, to spend extra time sorting these non-recyclable items.

"Last year, JSC recycled 631 tons of white paper, which is equivalent to saving more than 10,700 trees," said Bill Roeh, chief of Center Operations' Plant Engineering Division. "However, this success is in jeopardy unless employees are mindful of the items they are putting in the recycling bins. Non-recyclable items have to be hand-picked out of the bins, which is very labor intensive."

The items that are recyclable are: white paper (typing, writing, photocopying), white scratch paper, tabulating cards, index cards, computer printout paper and the JSC Roundup. Staples are acceptable in these

items. Some items not recyclable include: carbon paper, blueprint paper, envelopes, newspapers, etc.

"Now that the center has chosen to convert to a fixed-price maintenance contract, and since TBM's quote for services was in part based on revenues it collects from recyclable paper, it is more important than ever for JSC employees and contractors to recycle the proper items," said Cindy Ratliff, TBM's NASA monitor.

JSC's Plant Engineering Division makes it easy to recycle by providing cardboard receptacles for employees to place on or near their desk or buildings.

"If you don't have a paper recycling receptacle for your desk, please call TBM's work control, x39564, and they will provide the containers for your office or building," said Ratliff.

For more information on JSC's recycle program call Ratliff at x33208.

JSC Safety Alert

Pedestrians Beware

What Happened

"...This is about an accident waiting to happen. Users of crosswalks probably believe the crosswalks are ABSOLUTE safety zones. They neither look right nor left, but trust the system." Quote from a recent Close Call Report.

What You Can Do

Take responsibility for your own safety at all times, especially when crossing a street. If you surrender responsibility to someone else, you are putting yourself at risk. Security patrols are not always around and drivers may be distracted by many things. Only YOU can make a difference.

Follow JSC pedestrian rules for crosswalks

Obey all traffic and pedestrian control signs and signals; cross a street ONLY at a crosswalk or intersection; watch for oncoming traffic in both directions before you cross a street; wait on the curb, not in the street, until it is safe to enter a crosswalk; make sure a vehicle has enough room to stop before you step in front of it; make eye contact; keep to the right when crossing; remember, emergency vehicles ALWAYS have the right-of-way; be considerate of Space Center Houston trams and their passengers; and keep in mind that trams take longer to stop than a car.

What Is Being Done

Security will send a letter to the supervisor of any driver who almost hits a pedestrian if: The license plate number is turned in on a Close Call report. The license number can be traced by Security to someone who works on site. When security officers observe drivers who fail to yield or stop for pedestrians, a traffic citation will be issued to the driver. The driver will be assessed 5 points, and a copy of the citation will be forwarded to the driver's immediate supervisor.